

Certificate Of Analysis

**BUREAU VERITAS COMMODITIES AND
TRADE DE PANAMA, S.A**
Colón Laboratory
Bahía Las Minas, Provincia de Colón
Colón, Republica de Panama
+507 444-1277
panama.lab@bureauveritas.com

Asset Type	Shore Tank	Submitted By	Bureau Veritas Commodities and Trade Panama
Asset Name	Tanques de Minera / Punta Rincón	Inspection Location	Punta Rincon
Operation Type	Inventory	Date Sampled	01-Aug-2024
Product	ULSDO	Date Received	01-Aug-2024
Client	Terpel Panama	Date Tested	02-Aug-2024
Client Reference	NA	Date Reported	02-Aug-2024

Tanques de Minera / Punta Rincón -Surtidor MSA Running Inventory				
PAPAN-24-00752-001				Specification (RCTA 75.02.17:19)
Test	Method	Unit	Result	Min/Max
Density at 15°C	ASTM D4052-22	g/mL	0.8328	--
API Gravity @60°F	ASTM D4052-22	°API	38.3	--
Specific Gravity at 15/15°C	ASTM D4052-22	--	0.8336	--
Sulfur Content	ASTM D5453-16e1	mg/kg	6.4	15 max
Manual/Automated	ASTM D86-23	--	Manual	--
IBP	ASTM D86-23	°C	170.0	--
10% Evaporated	ASTM D86-23	°C	199.0	--
50% Evaporated	ASTM D86-23	°C	249.0	--
90% Evaporated	ASTM D86-23	°C	322.0	--
Endpoint	ASTM D86-23	°C	351.0	--
Recovery	ASTM D86-23	% (V/V)	98.0	--
Loss	ASTM D86-23	% (V/V)	0.9	--
Residue	ASTM D86-23	% (V/V)	1.1	--
Cetane Index	ASTM D976-21e1	--	48.7	45 min
Corrected Flash Point	ASTM D93A-20	°C	65.0	52.0 min
Water and Sediment	ASTM D2709-22	% (V/V)	< 0.01	0.05 max
Test Temperature	ASTM D6079-04-04	°C	60	--
Major Axis	ASTM D6079-04-04	mm	0.43	--
Minor Axis	ASTM D6079-04-04	mm	0.38	--
Wear Scar Diameter	ASTM D6079-04-04	µm	400	520 max
>= 4 µm(c)	ISO 4406:2017** ¹	ISO code	406.97	--
>= 6 µm(c)	ISO 4406:2017** ¹	ISO code	63.40	--
>= 14 µm(c)	ISO 4406:2017** ¹	ISO code	3.30	--

**** Test(s) not within the scope of LE No. 003 certificate issued by the Consejo Nacional de Acreditacion de Panamá, in accordance with the criteria of DGNTI-COPANIT-ISO / IEC 17025 as testing laboratories, in the facilities located in Bahías Las Minas (Colón) and Balboa (Panamá). For further information about accredited method, contact our laboratory.**

Remark:

Contaminant code: 16/16/9

Comments:

¹ Analysis performed by subcontracted laboratory

AUTHORIZED SIGNATURE



Barney Ramirez, Lab Technician

End of Report

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